

Billing Code 4333–15

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS-R5-ES-2015-N021; FXES11130500000-167-FF05E00000]

Endangered and Threatened Wildlife and Plants; Draft Recovery Plan for the Gulf of Maine Distinct Population Segment of Atlantic Salmon

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of availability and request for public comment.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce the availability of a draft recovery plan for the endangered Gulf of Maine Distinct Population Segment (DPS) of Atlantic salmon. This draft plan has been prepared jointly by the Service and the National Marine Fisheries Service (NMFS). The draft recovery plan includes specific recovery objectives and a set of criteria that, when met, would allow us to consider reclassifying the DPS from endangered to threatened under the Endangered Species Act of 1973, as amended (Act), and, ultimately, to remove the GOM DPS of Atlantic salmon from the Federal List of Endangered and Threatened Wildlife. We

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request review of and comment on this draft recovery plan from Federal, State, and local agencies; Tribes; nongovernmental organizations; and the public.

**DATES:** Submitting Comments: In order to be considered, comments on the draft recovery plan must be received by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Public Information Meetings: Informational meetings in Maine have been scheduled for April 19, 2016, from 6:30 P.M. to 8:30 P.M. in Brewer, and for April 20, 2016, from 6:30 P.M. to 8:30 P.M. in Waterville (see **ADDRESSES**). Each meeting will include a presentation on the draft recovery proposals and a question and answer period with staff from the Service and NMFS.

ADDRESSES: Obtaining Documents: If you wish to review the draft recovery plan or have questions, you may contact Steve Shepard, via U.S. mail at U.S. Fish and Wildlife Service, Maine Field Office, 17 Godfrey Drive, Suite 2, Orono, ME 04473; via telephone at 207–866–3344 x1116; or via email at steve\_shepard@fws.gov; or Dan Kircheis, National Marine Fisheries Service, 17 Godfrey Drive, Orono, ME 04473; via telephone at 207–866–7320; or via email at dan.kircheis@noaa.gov. You can also download a copy by visiting

http://atlanticsalmonrestoration.org/resources/documents/atlantic-salmon-recovery-plan-2015.

Submitting Comments: If you wish to comment, you may submit your comments by one of the following methods:

- You may mail written comments and materials to Steve Shepard, at the above address.
- 2. You may hand-deliver written comments to Steve Shepard at the above address, or fax them to 207–866–3351.
  - 3. You may send comments by email to steve\_shepard@fws.gov.
- 4. You may submit handwritten comments at either of the two public information meetings announced in this notice.

For additional information about submitting comments, see **Request for Public Comments**.

Public Information Meetings: Meetings will be held in the following Maine locations: at Jeff's Catering, East/West Industrial Park, 15 Littlefield Way in Brewer, and at the Best Western PLUS Motel, 375 Main Street, Exit 130 in Waterville. See **DATES** above for the date and time of each meeting.

**FOR FURTHER INFORMATION CONTACT:** Steve Shepard, U.S. Fish and Wildlife Service; or Dan Kircheis, National Marine Fisheries Service (see **ADDRESSES**).

SUPPLEMENTARY INFORMATION: We, the U.S. Fish and Wildlife Service (Service), announce the availability of a draft recovery plan for the endangered Gulf of Maine (GOM) Distinct Population Segment (DPS) of Atlantic salmon (*Salmo salar*). This draft plan has been prepared jointly by the Service and the National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Administration. The

draft recovery plan includes specific recovery objectives and a set of criteria that, when met, would allow us to consider reclassifying the DPS from endangered to threatened under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*; Act), and, ultimately, to remove the GOM DPS of Atlantic salmon from the Federal List of Endangered and Threatened Wildlife. The plan also includes site-specific management actions and time and cost estimates, as required by the Act. We request review of and comment on this draft recovery plan from Federal, State, and local agencies; Tribes; nongovernmental organizations; and the public.

## **Background**

The GOM DPS of Atlantic salmon was originally listed as an endangered species under the Act (16 U.S.C. 1531 *et seq.*) on November 17, 2000 (65 FR 69459), and a recovery plan for the DPS was approved on December 2, 2005. Based on a second status review, the DPS listing was revised on June 19, 2009 (74 FR 29344), to cover an expanded range that encompassed additional large river systems in Maine found to contain Atlantic salmon population genetically similar to those in the previously listed coastal river populations. Critical habitat for the GOM DPS was also designated at this time (June 19, 2009; 74 FR 29300).

The expanded DPS includes all anadromous Atlantic salmon in a freshwater range covering the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River. The listing includes all associated conservation hatchery

populations used to supplement these natural populations. The critical habitat rule divided the DPS range into three recovery units, termed Salmon Habitat Recovery Units, or SHRUs: (1) The Merrymeeting Bay SHRU, which covers the Androscoggin and Kennebec basins, and extends east to include the Sheepscot, Pemaquid, Medomak, and St. George watersheds; (2) the Penobscot Bay SHRU, which covers the entire Penobscot basin and extends west to and includes the Ducktrap watershed; and (3) the Downeast SHRU, including all coastal watersheds from the Union River east to the Dennys River.

The 2009 listing rule recognized three primary threats to Atlantic salmon: Dams, inadequacy of regulatory mechanisms related to dams, and marine survival. In addition, numerous secondary threats were identified, including habitat quality and accessibility, commercial and recreational fisheries, disease and predation, inadequacy of regulatory mechanisms related to water withdrawal and water quality, aquaculture, artificial propagation, climate change, competition, and depleted diadromous fish communities. Collectively, these stressors were deemed a fourth major threat. Since listing, our understanding of threats to the DPS has continued to grow. New and emerging threats, all of which are considered to constitute significant impediments to recovery, include road stream crossings that impede fish passage, international intercept fisheries, and the effects of climate change.

Restoring an endangered or threatened animal or plant to the point where it is again a secure, self-sustaining member of its ecosystem is a primary goal of our

endangered species program. To help guide the recovery effort, we prepare recovery plans for most listed species.

Under the Act, to the maximum extent practicable, recovery plans must describe sitespecific actions considered necessary for conservation of the species, establish criteria for delisting the species, and provide time and cost estimates for taking the actions necessary to recover the species to the point where it can be delisted.

The Act requires the development of recovery plans for listed species, unless such a plan would not promote the conservation of a particular species. Section 4(f) of the Act requires us to provide public notice and an opportunity for public review and comment during recovery plan development. We will consider all input provided during the public comment period prior to approval of each new or revised recovery plan. We and other Federal agencies will also take these comments into account in the course of implementing approved recovery plans.

Recovery of the GOM DPS of Atlantic salmon has been designated a joint responsibility of the Service and NMFS, with lead responsibility for this recovery plan assigned to the Service. We note that this draft recovery plan for the GOM DPS of Atlantic salmon follows a new planning approach endorsed by the Service and, for this plan, by NMFS. The new approach, termed the Recovery Enhancement Vision (REV), focuses on the three recovery plan elements required by the Act: Site-specific management actions; objective, measurable criteria for delisting; and the estimated time and costs needed to achieve delisting and intermediate steps toward that goal. The

recovery actions are presented at the scale of the SHRUs. These actions address both survival and recovery needs and are site-specific as required by section 4(f)(1)(B)(i) of the Act, taking into account both the comprehensive nature and long timeframe needed to reach reclassification and delisting objectives.

All relevant supporting information and analyses, as well as short-term implementation strategies for the recovery actions in the plan, are posted on the Atlantic Salmon Restoration Web site, at http://atlanticsalmonrestoration.org/resources/documents/atlantic-salmon-recovery-plan-2015. The draft plan contains hyperlinks that allow readers to readily access additional supporting information, including SHRU-level workplans, which can be updated as needed. The SHRU-level workplans will step down from the actions in the recovery plan to address geographically based needs in the short term. DPS-wide or nonspatial actions (e.g., genetic research) will also be stepped down to short-term workplans. It is important to note that while these workplans will link back to the recovery plan, they are not considered part of the recovery plan itself.

Although REV recovery plans focus on the Act's statutory requirements, any given plan may include additional information deemed necessary by the lead U.S. Fish and Wildlife Service Region. For the Atlantic salmon recovery plan, we have added background information that is highly relevant to the long-term recovery vision, as well as an implementation table that outlines responsibilities and costs for the actions

described in the plan. The various components contained in the draft plan document are briefly described below.

## **Recovery Plan Components**

The draft recovery plan for GOM DPS of Atlantic salmon focuses on the following components: The recovery strategy, recovery objectives and criteria, recovery actions, and time and cost estimates. The long-term recovery strategy for the endangered Atlantic salmon is based on two premises: First, that recovery must focus on rivers and estuaries located in the GOM DPS until we better understand threats in the marine environment, and second, that survival of Atlantic salmon in the GOM DPS will be dependent on conservation hatcheries throughout much of the recovery process. In addition, the scientific foundation for the recovery strategy includes conservation biology principles regarding population viability, our understanding of freshwater habitat viability, and our understanding of current and emerging extinction risks. Other components of the recovery strategy include adaptive management, phasing of recovery actions, a geographic framework based upon the three SHRUs, and a collaborative approach that focuses on full inclusion of partners in implementing recovery actions. Finally, as previously described, short-term recovery priorities stepping down from the recovery plan will be formulated in SHRU-level workplans; these are found on the Web site and are not part of the plan itself.

The recovery objectives and criteria in the draft plan address biological recovery needs, threats identified at the time of listing, and newly emerging threats. The reclassification objectives are to maintain sustainable, naturally reared populations with access to sufficient suitable habitat in each SHRU, to ensure that management options for marine survival are better understood, and to reduce or eliminate those threats that either individually or in combination pose a risk of imminent extinction to the DPS. The delisting objectives are to maintain self-sustaining, wild populations with access to sufficient suitable habitat in each SHRU, to ensure that necessary management options for marine survival are in place, and to sufficiently reduce or eliminate all threats that either individually or in combination pose a risk of endangerment to the DPS.

The biological criteria for meeting the reclassification objectives include:

• A total annual escapement of at least 1,500 naturally reared adults spawning in the wild, with at least 2 of the 3 SHRUs having at least 500 naturally reared adults. Annual escapement refers to salmon that return to the river and successfully reproduce on the spawning grounds in a given year. For the purposes of this plan, naturally reared adults are individuals originating from wild spawners and hatchery eggs, fry, and parr. Egg and fry stocked salmon are not given an external mark, so when they return as adults, it is not possible (except with genetic testing) to differentiate them from wild salmon;

- A population growth rate in each of at least two of the three SHRUs of greater than 1.0 in the 10-year period preceding reclassification, with adults originating from hatchery-stocked eggs, fry, and parr included in population growth rates; and
- Sufficient spawning and rearing habitat for the offspring of the 1,500 naturally reared adults distributed throughout designated Atlantic salmon critical habitat, with at least 7,500 accessible and suitable habitat units (HUs) in each of at least 2 of the 3 SHRUs, located according to the known and potential migratory patterns of returning salmon.

The biological criteria for meeting the delisting objectives include:

- A self-sustaining annual escapement of at least 2,000 wild adults in each SHRU, for a DPS-wide total of at least 6,000 wild adults. For the purposes of this plan, wild salmon are individuals that have spent their entire life cycle in the wild and originate from parents that were also spawned and continuously lived in the wild;
- A population growth rate in each SHRU of greater than 1.0 in the 10-year period preceding delisting and, at the time of delisting, demonstrable self-sustaining persistence; and
- Sufficient suitable spawning and rearing habitat for the offspring of the 6,000 wild adults distributed throughout the designated Atlantic salmon critical habitat, with at least 30,000 accessible and suitable HUs in each SHRU, located according to the known migratory patterns of returning wild adult salmon.

In addition to the biological recovery criteria, the draft plan identifies several criteria for abating both primary and secondary threats to the DPS. Overall, threats to the GOM DPS identified both at the time of listing and since then must be diminished prior to reclassification and, to a greater extent, prior to delisting. All primary threats must be individually abated according to stated criteria, although recognition of which threats are primary may change over time. For secondary threats, tradeoffs may be made in terms of which criteria are met, as long as the degree to which these threats are collectively reduced sufficiently diminishes the likelihood of extinction and, ultimately, endangerment. Adaptive management and collaborative partnerships will be essential for determining to what extent secondary threats must be resolved in association with abatement of primary threats.

To meet the recovery criteria and achieve the recovery objectives for the GOM DPS of Atlantic salmon, this draft recovery plan focuses on the actions necessary to achieve long-term viability of DPS Atlantic salmon populations. We note that these actions address both short-term survival needs and long-term recovery needs.

Geographically based actions will be further specified in SHRU work plans, while research and genetics management actions will be addressed in rangewide implementation strategies. The seven categories of recovery actions for the DPS include:

- 1. Habitat Connectivity: Actions for enhancing connectivity between the ocean and freshwater habitats important for salmon recovery.
- 2. Genetic Diversity: Actions for maintaining the genetic diversity of Atlantic salmon populations over time.

- 3. Conservation Hatchery: Actions for increasing numbers of adult spawners through the conservation hatchery program.
- 4. Freshwater Conservation: Actions for increasing numbers of adult spawners through the freshwater production of smolts.
- 5. Marine and Estuary: Actions for increasing Atlantic salmon survival through increased understanding of these ecosystems and identification of spatial and temporal constraints to salmon marine productivity in order to identify management actions that are likely to increase marine survival rates.
- 6. Federal/Tribal Coordination: Actions for consulting with all involved Tribes on a government-to-government basis.
- 7. Outreach, Education, and Engagement: Actions for collaborating with partners and engaging interested parties in recovery efforts for the GOM DPS.

The estimated time for fully implementing all recovery actions and achieving the goal of delisting the Gulf of Maine DPS of Atlantic salmon is, very roughly, 75 years from the present time. This time frame accounts for approximately 15 generations of salmon and assumes a full investment of resources into the recovery program for the DPS.

Over the 75-year time frame, the total cost of recovery is projected to be approximately \$350 million; again, this is an extremely speculative estimate, particularly given the uncertainties surrounding recovery of this DPS. The estimate assumes that costs of the various actions will accrue unevenly and that costs will diminish over time as

projects are completed and best management practices are implemented. It is equally difficult to estimate a time and cost for reclassification because of uncertainties associated with the current significant threats to the species, especially marine survival, and impacts of climate change. A best-case scenario based on the current reclassification criteria is roughly 10 years. Under this scenario, the estimated cost for reclassification is estimated at \$140,428,000.

We emphasize that these time and cost estimates are highly subject to change and are not intended to serve any purpose other than addressing our obligation to provide the public with our best understanding of the general level of effort and expense that might be needed to meet the ultimate recovery goal of delisting. It is also important to note the costs involved in implementing recovery actions for the GOM DPS of Atlantic salmon will provide other vital ancillary benefits. These include but are not limited to conservation of other diadromous species in the Gulf of Maine, improved water quality and flow in salmon rivers, an enhanced understanding of sustainable management for numerous aquatic resources, and a reduction of stressors that affect not only Atlantic salmon but general environmental quality.

## **Request for Public Comments**

We request written comments on the draft recovery plan. We will consider all comments we receive by the date specified in **DATES** prior to final approval of the plan.

**Public Availability of Comments** 

Before including your address, phone number, email address, or other personal

identifying information in your comments, you should be aware that your entire

submission—including your personal identifying information—may be made publicly

available at any time. Although you can request in your comment that we withhold your

personal information from public examination, we cannot guarantee that we will be able

to do so.

**Authority** 

The authority for this action is section 4(f) of the Endangered Species Act, 16

U.S.C. 1533 (f).

**Dated:** March 14, 2016.

Kenneth D. Elowe

**Acting Regional Director, Northeast Region** 

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